



U.S. AIR FORCE

United States Air Force

Air Force Contagious Casualty Management Project



**Lt Col Richard McCoy
AFMSA/SGPF**

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Overview

- **Purpose.** Present the AF plan to develop a CCM capability to support Treat-in-Place (TIP) and Aeromedical Evacuation (AE) operations
- **Background**
 - The FY03 AF Integrated Capability Review and Risk Assessment and FY06-11 Annual Planning and Programming Guidance identified requirement to manage contagious casualties in CONUS/OCONUS
 - AMC,TRANSCOM identified limitations of moving contagious casualties in two policy letters, dated 20 Mar 03 and 17 Sep 03
 - AFMS must develop a deployable capability to treat contagious casualties in place should a biological warfare attack or disease outbreak occur
 - Validated by OIF Lessons Learned





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Overview, Cont'd

■ **Background, Cont'd**

- **AF Biological Defense Task Force (now CBRNE Master Plan) identified two action items that this capability would address:**
 - **Action Item 009 - Assess Operational Impacts of Quarantine, Restriction of Movement and Evacuation Following a Biological Agent Event**
 - **Action Item JS/OSD004 - Address Surge Capabilities In Event of Mass Casualty A**





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Overview, Cont'd

■ **Discussion**

- **AF/SGO directed CCM working group from Air Staff, ACC, AMC and AFSOC develop plan to address DOTMLPF requirements to manage contagious casualties**
 - **Working Group reviewed current AF capabilities, operational considerations, and USAMRIID capabilities**
 - **Based on operational considerations and limited ability to transport contagious casualties, Working Group recommended a limited capability to transport contagious casualties and emphasis on treatment-in-place**

■ **Assumptions**

- **National security, global health or political considerations will necessitate movement of an index case or small numbers (less than ten) contagious casualties to definitive diagnosis and care**
- **An outbreak at an AF installation will likely overwhelm transport and receiving capabilities - AF must have capability to stabilize, transport, and treat-in-place contagious casualties on an AF installation or AEF beddown**



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Overview, Cont'd

- **Requires Concept of Operation/TTP, Allowance Standards, F3 Test Plan, Training Plan, POM and WRM Spend Plan Requirements**
- **Plan**
 - **AF/SGO request an ACC/SG led effort to develop the AF CCM treat in place capability by 30 Jun 05**
 - **End of FY05 or early FY06 - F3**
 - **IOC FY06 - Limited capability - TBD beds**
 - **FOC FY08 - TBD beds total**
 - **AF/SGO support AMC SG/A3/A5 efforts to field AF AE CCM capability**
 - **IOC FY07 - 8 Patient Isolation Units (PIU)**
 - **FOC FY09 - 20 PIUs total**



Launch of AF CCM Project

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- **10 Aug 04 - AF/SGO requested ACC and AMC lead their respective 'Weapon Systems' in a concerted AF CCM capability development project**

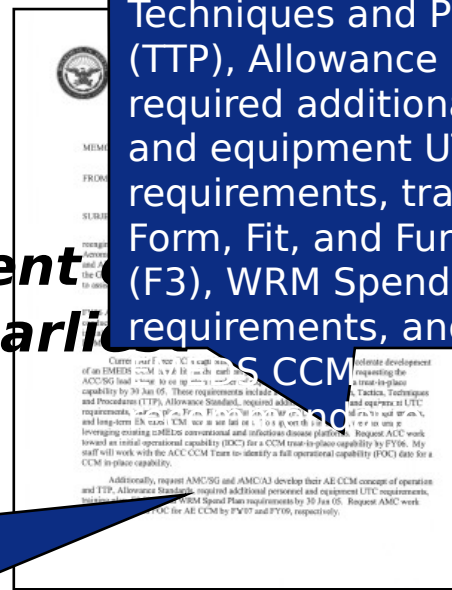
- **ACC - Treat-in-Place**
- **AMC - AE**

- **30 Jun 05 - Approval date**

■ ***"We must accelerate development of an EMEDS CCM capability at the earliest possible date"***

AMC - ...develop their AE CCM concept of operation and TTP, Allowance Standards, required additional personnel and equipment UTC requirements, training plan, F3 Plan, and WRM Spend Plan

ACC - ...concept of operation, Tactics, Techniques and Procedures (TTP), Allowance Standard, required additional personnel and equipment UTC requirements, training plan, Form, Fit, and Function Plan (F3), WRM Spend Plan requirements, and long-term





Notional Building Blocks of AF CCM Treat-in-Place Capability

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SPEAR

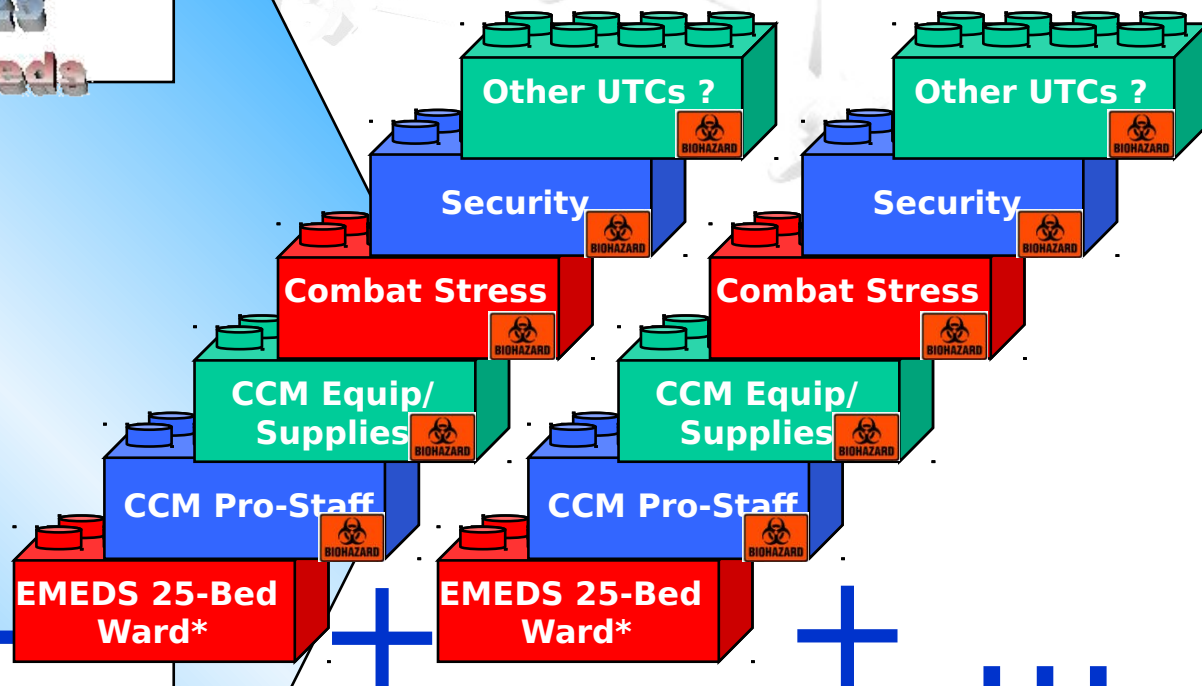
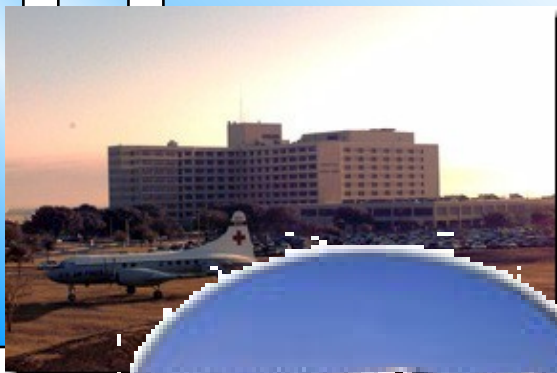
EMEDS

10

Beds

28

Beds



*FFEEW Hospital Expansion Package (885B - 5 Pal

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Notional AF CCM AE Capability

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High Level Operational Concept

CONUS

Level 5



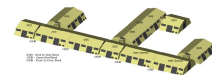
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CASF / AESMT



COMMZ

Level 3



CSH
EMEDS/CASF

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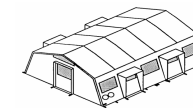


INTRA
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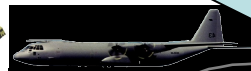
CCATT

MASF / AELT



COMBAT ZONE

Secure Airfield
Level 2



BAS/CCP



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Level 1

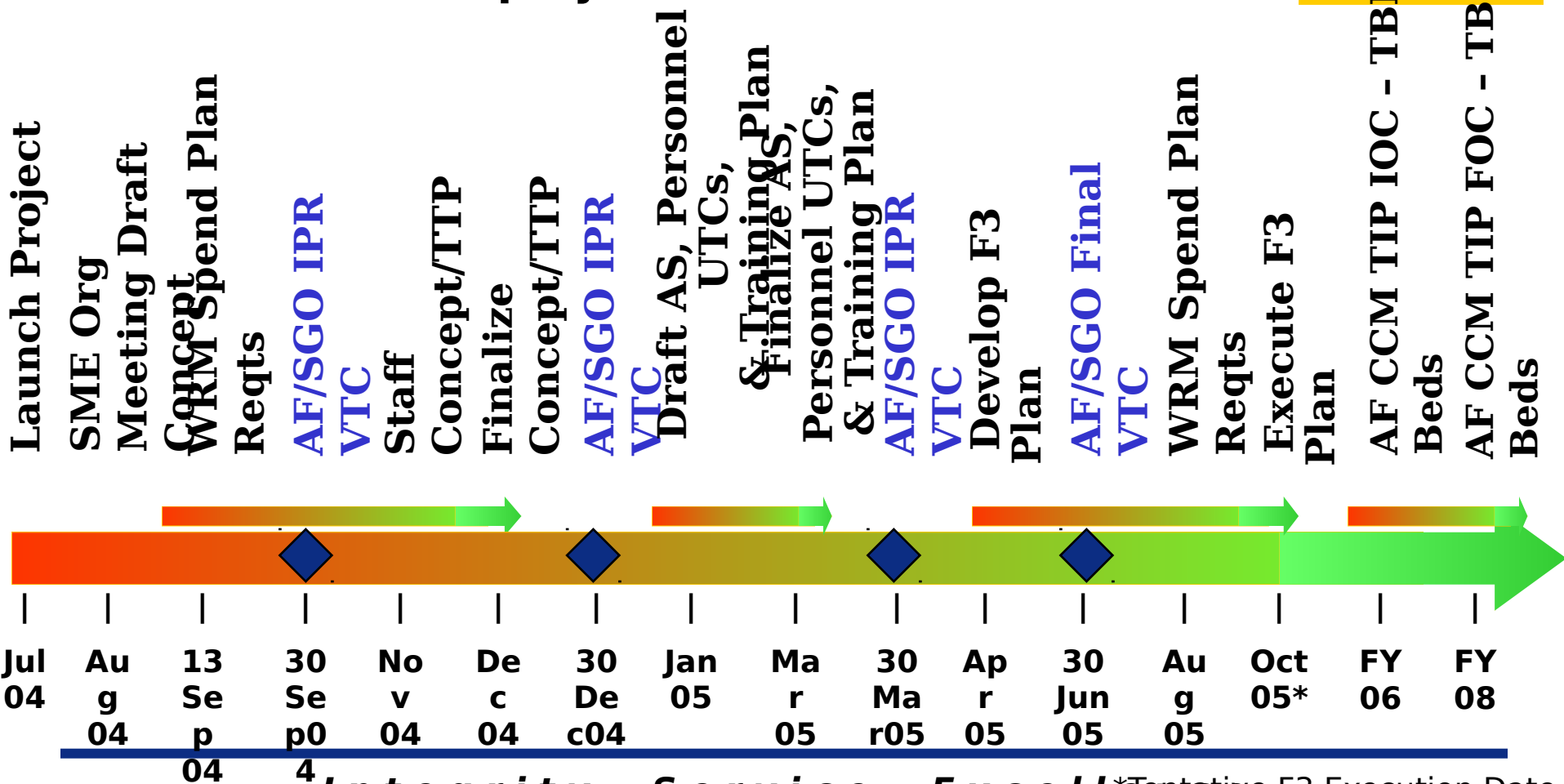
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Contagious Casualty Management Treat-In-Place

- Develop EMEDS Block 20 Capability to treat contagious casualties in a deployed environment - ACC is MERRA (TIP)



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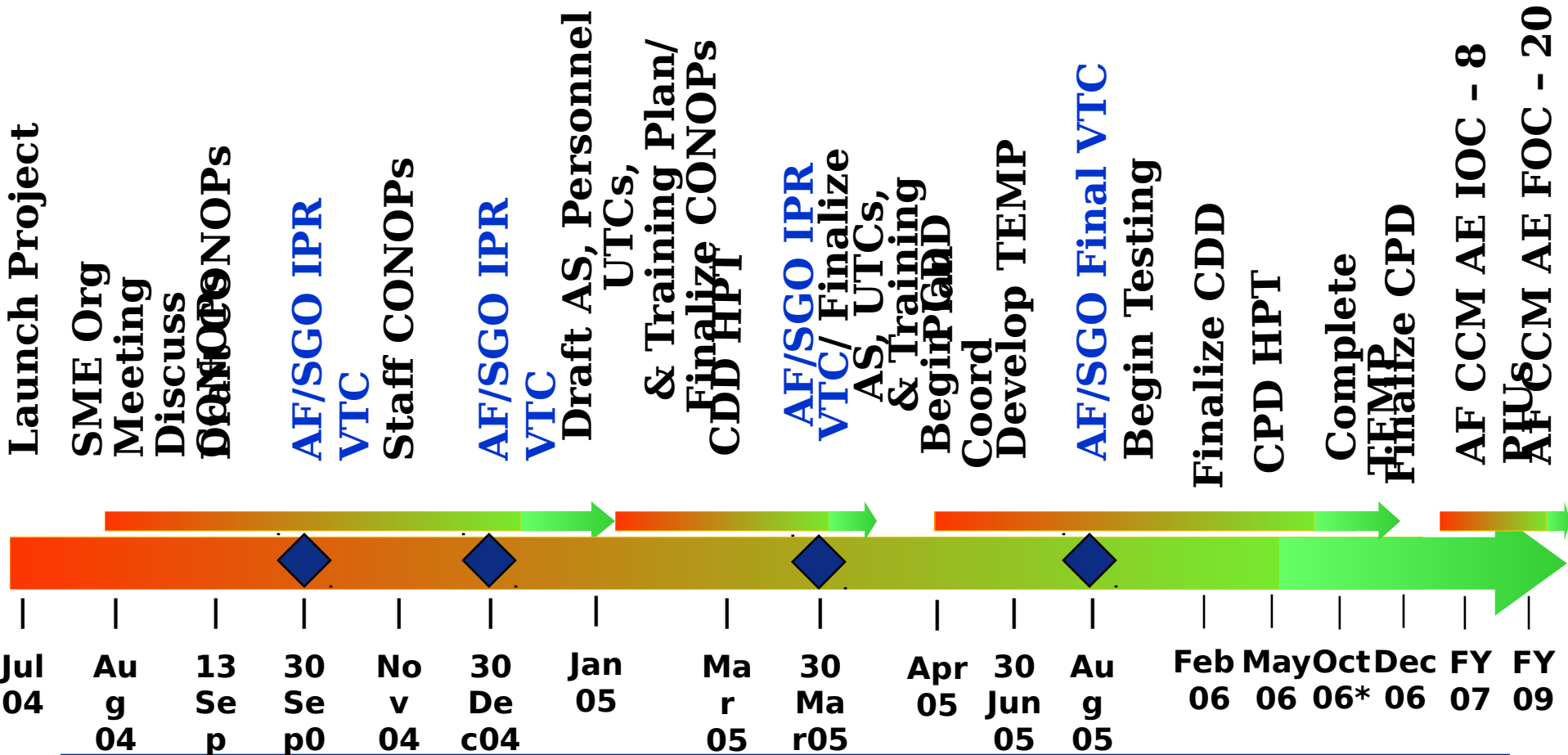
* Tentative F3 Execution Date



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Contagious Casualty Management AE

- Develop AE Capability to transport contagious casualties in a deployed environment - AMC is MEFPAK



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* Tentative F3 Execution Date



Air Staff CCM Issues

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■ Disease Management

- How many casualties should we plan for? 25...100... 250...X
- How many can we realistically treat in a field situation
- Type of Detection/Identification - When to execute CCM assets, eg., presumptive vice confirmatory - *'Launch on Warning'*
- Level of Care, ie., CONUS, OCONUS
- C2 including Contagious Casualty Management Officer and Public Health Emergency Officer
- Capability to augment MTFs and EMEDS
- Isolation - Sick, maybe sick, treatment of non-contagious
- Restriction of Movement (ROM)/quarantine
- Mass prophylaxis protocol
- Proximity to other facilities/personnel
- Management of human remains
- Med surveillance requirements





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Air Staff CCM Issues, Cont'd



- **Disease Management, Cont'd**
 - **Given limited AE capability, what would drive us to evacuate sentinel cases**
 - **Where would evacuees go**
 - **Special requirements for vehicle transport of casualties to other facilities**
 - **Impact on FFHA2 (6 personnel pkgs, 3 equipment sets (5 pallets) and FFHA5 (8 personnel pkgs) - What will be done with these 2 UTCs**

AIR FORCE MEDICAL SERVICE (AFMS) CONCEPT OF OPERATIONS FOR THE INFECTIOUS DISEASE

AUGMENTATION (FFHA5)

Prepared by: GERT M. BAILES, MAJ, USAF
Chief, Force Plans and Health Care Analysis
Office of the Command Surgeon

Reviewed by: PATT V. HOFFMAN, Maj, USAF
Director, Infection Control
74 MDG/SGHQI

Submitted by: JAY D. SPRENGER
Colonel, USAF, MC, SFG
Acting, Command Surgeon

Approved by: CHARLES H. ROADMAN II
Lieutenant General, USAF, MC
Surgeon General

AIR FORCE MEDICAL SERVICE (AFMS)



CONCEPT OF OPERATIONS FOR THE INFECTIOUS DISEASE MODULE (FFHA2)

Prepared by: GERT M. BAILES, MAJ, USAF, MSC
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Colonel, USAF, DC
Command Surgeon

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Air Staff CCM Issues, Cont'd

- **Personnel**
 - **Augmentation - CCM Pro-staff, CISM, security, nurses, radiology, biomed-, lab-, med-, and respiratory techs, others**
 - **What specialists are necessary to support CCM?**
 - **Vaccination policy for augmenting personnel**
 - **Security requirements**
- **Equipment**
 - **What should be in a CCM equipment package**
 - **Sizing of asset - 10-bed, 25-bed.....increments**
 - **Number of ventilators required**
 - **Post-mission decon requirements**
 - **Infectious waste disposal requirements**
 - **Fate of EMEDS BW/CW Pallet**
- **PPE/Protection**
 - **What PPE for staff?**
 - **Patient/Staff Decon requirements**



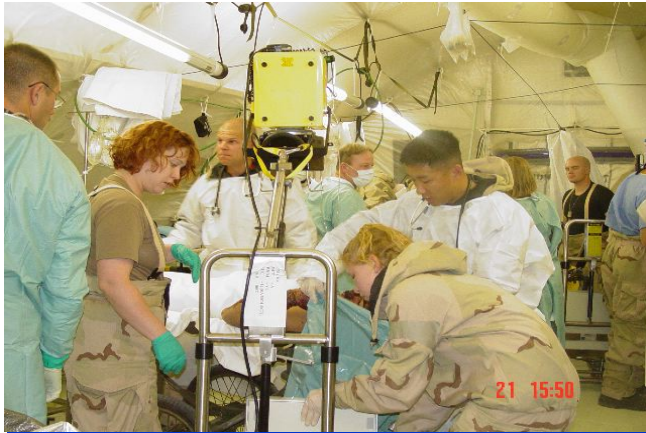


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Air Staff CCM Issues, Cont'd

■ **Training**

- **CCM training requirements for augmenting staff**
- **CCM training for other staff (MTF & EMEDS)**
- **How to accomplish training**
- **What should be included in Self-Aid/Buddy Care training for non-medical personnel**





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Air Staff Expectations

**ACC and AMC develop their CCM
Treat-in-Place and AE capabilities**





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Questions





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Back Ups



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BW Agent Risk Assessment: DoD Matrix

Intelligence Threat (HAZARD PROBABILITY)

GREATEST

← LEAST

Medical Risk ↑	GREATEST	Catastrophic	None	None	Ebola	None
		Critical	Anthrax Bot.Toxin Plague Ricin	Smallpox Enceph. virus (EEE, WEE)	None	None
		Marginal	None	Tularemia SEB (Staph. Enterotoxin)	Glanders	Mycotoxins (Tricothecene)
	LEAST	Negligible	None	Enceph. virus (VEE)	Q-Fever Cholera	Brucellosis Typhus

1. Adapted from Medical Risk Assessment of the Biological Threat, May 2001

2. Medical risk assumes no pre-exposure countermeasures (e.g. vaccines) implemented